

# Notice of Allowability

Application No.

09/829,866

Examiner

Scott L. Jarrett

Applicant(s)

SMITH ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/20/2007.
2. ☒ The allowed claim(s) is/are 1,3-5,7-10,12-14 and 16-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3500

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Eric Krischke (Reg. No. 42,769) on August 3, 2007.

The examiner's amendment below cancels Claims 2, 6, 11, 15, and 20 and amends claims 1, 3-5, 7-10, 12-14 and 16-19. Claims 1, 3-5, 7-10, 12-14 and 16-19, as amended below, are allowed.

**Amendments to the Claims:**

1. (Currently Amended) A method of displaying the capacity utilization of a goods delivery system, the goods delivery system having ~~at least one a~~ a delivery agent location, an address and a delivery zone, said method implemented by a computing unit and comprising the steps of:

~~getting~~ obtaining delivery agent information of a delivery agent that delivers a plurality of goods, the delivery agent information comprising at least one of a delivery agent location, a delivery agent name, a delivery agent code, a delivery management system schedule name and a delivery agent zone group name;

calculating a first delivery capacity for said delivery agent information, the first delivery capacity comprising a first volume defined by a first plurality of slots, each slot defining a slot volume;

assigning a work unit to each good of the plurality of goods representing a multiplication factor associated with each good and indicative of a portion of the first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based on ~~at least one of~~ a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the first delivery capacity;

calculating, by the computing unit, a portion of the first delivery capacity used for said delivery agent information based on assigned work units;

calculating usage information for said delivery agent information based on a single day and a delivery zone;

displaying a periodic calendar format illustrating said delivery agent information and delivery agent statistics for a respective zone for each day in a respective period, the delivery agent statistics comprising at least one of a delivery capacity, a reserved capacity and scheduled deliveries;

said periodic calendar further adapted to have drill down capability to display additional daily details;

determining whether the first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded;

determining whether a second delivery capacity of the delivery agent to deliver the goods during a second period is exceeded; and

determining to deliver the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity.

2. (Canceled)

6. (Canceled)

10. (Currently Amended) A computer program embodied on a computer readable medium for executing a computer process for displaying the capacity utilization of a goods delivery system, the goods delivery system having ~~at least one a~~ delivery agent location, an address and a delivery zone, said computer program comprising at least one code segment for employing a of displaying the capacity utilization comprising the steps of:

~~getting~~ obtaining delivery agent information of a delivery agent that delivers a plurality of goods, the delivery agent information comprising at least one of a delivery agent location, a delivery agent name, a delivery agent code, a delivery management system schedule name and a delivery agent zone group name;

calculating a first delivery capacity for said delivery agent information, the first delivery capacity comprising a first volume defined by a first plurality of slots, each slot defining a slot volume;

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assigning a work unit to each good of the plurality of goods representing a multiplication factor associated with each good and indicative of a portion of the first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based on ~~at least one~~ of a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the first delivery capacity;

calculating a portion of the first delivery capacity used for said delivery agent information based on assigned work units;

calculating usage information for said delivery agent information based on a single day and a delivery zone;

displaying a periodic calendar format illustrating said delivery agent information and delivery agent statistics for a respective zone for each day in a respective period, the delivery agent statistics comprising at least one of a delivery capacity, a reserved capacity and scheduled deliveries;

said periodic calendar further adapted to have drill down capability to display additional daily details;

determining whether the first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded;

determining whether a second delivery capacity of the delivery agent to deliver the goods during a second period is exceeded; and

determining to deliver the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity.

11. (Canceled)

15. (Canceled)

19. (Currently Amended) A apparatus for displaying the capacity utilization of a goods delivery system, the goods delivery system having ~~at least one a~~ delivery agent location, an address and a delivery zone, said apparatus for displaying the capacity utilization comprising:

means for ~~getting~~obtaining delivery agent information of a delivery agent that delivers a plurality of goods, the delivery agent information comprising at least one of a delivery agent location, a delivery agent name, a delivery agent code, a delivery management system schedule name and a delivery agent zone group name;

means for calculating a first delivery capacity for said delivery agent information, the first delivery capacity comprising a first volume defined by a first plurality of slots, each slot defining a slot volume;

means for assigning a work unit to each good of the plurality of goods representing a multiplication factor associated with each good and indicative of a portion of the first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based on ~~at least one of~~ a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the first delivery capacity;

means for calculating a portion of the first delivery capacity used for said delivery agent information based on assigned work units;

means for calculating usage information for said delivery agent information based on a single day and a delivery zone;

means for displaying a periodic calendar format illustrating said delivery agent information and delivery agent statistics for a respective zone for each day in a respective period, the delivery agent statistics comprising at least one of a delivery capacity, a reserved capacity and scheduled deliveries;

means for said periodic calendar further adapted to have drill down capability to display additional daily details;

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means for determining whether the first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded;

means for determining whether a second delivery capacity of the delivery agent to deliver the goods during a second period is exceeded; and

means for determining to deliver the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity.

20. (Canceled)

### **ALLOWANCE**

The following is an Allowance in response to the Applicant's Amendment filed May 30, 2007 and the Interview with Mr. Eric Krischke on August 3, 2007. Claims 1, 3-5, 7-10, 12-14 and 16-19 are currently pending and allowed below.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance.

The present invention is directed to a goods (major appliances) delivery system and method comprising displaying the capacity utilization of the goods delivery system in a periodic calendar format, having drill down capability to display additional daily details, illustrative of a delivery agent's information (location, name, code, schedule name, or zone group) and statistics (delivery capacity, reserved capacity or scheduled deliveries) for a respective zone for each day in a respective period; calculating a portion of the delivery agent's delivery capacity used based on assigned work units to each good of the plurality of goods wherein the assigned work units represent a multiplication factor associated with each good and are indicative of a portion of a first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the delivery capacity; determining whether a first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded; determining whether a second delivery capacity of the delivery agent to



deliver the goods during a second period is exceeded; and determining to deliver the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity.

The closest prior art ROADNET and WebVan fail to teach or suggest either singularly or in combination a goods delivery system and method comprising displaying the capacity utilization of the goods delivery system in a periodic calendar format, having drill down capability to display additional daily details, illustrative of a delivery agent's information including at least one of location, name, code, schedule name, or zone group and statistics including at least one of delivery capacity, reserved capacity or scheduled deliveries for a respective zone for each day in a respective period; calculating a portion of the delivery agent's delivery capacity used based on assigned work units to each good of the plurality of goods wherein the assigned work units represent a multiplication factor associated with each good and are indicative of a portion of a first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the delivery capacity; determining whether a first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded; determining whether a second delivery capacity of the delivery agent to deliver the goods during a second period is exceeded; and determining to deliver the goods during the second period upon determining that the

first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity as recited in independent Claims 1, 10 and 19.

ROADNET teaches a goods delivery system and method having at least one delivery agent location, address and delivery zone comprising: obtaining delivery agent information of a delivery agent that delivers a plurality of goods; calculating a first delivery capacity comprising a first volume defined by a plurality of slots each slot defining a volume; assigning a work unit to each of the plurality of goods indicative of the portion of volume defined by a number of slots used to delivery each good wherein the work unit is based on at least one of a size of the good and time to deliver/install goods; calculating a portion of the delivery capacity used based on the assigned work units; calculating usage information for the delivery agent based on a single day and a delivery zone; displaying a periodic calendar format illustrating the delivery agent information and delivery agent statistics for a respective zone for each day in a respective period wherein the format is further adapted to have drill-down capability to display additional daily details; determining whether a first delivery capacity of the delivery agent during a first period is exceeded; determining whether a second delivery capacity of the delivery agent during a second period is exceeded; and determining to delivery the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity.

ROADNET fails to teach or suggest a goods delivery system and method comprising displaying the capacity utilization of the goods delivery system in a periodic calendar format, having drill down capability to display additional daily details, illustrative of a delivery agent's information including at least one of location, name, code, schedule name, or zone group and statistics including at least one of delivery capacity, reserved capacity or scheduled deliveries for a respective zone for each day in a respective period; calculating a portion of the delivery agent's delivery capacity used based on assigned work units to each good of the plurality of goods wherein the assigned work units represent a multiplication factor associated with each good and are indicative of a portion of a first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the delivery capacity; determining whether a first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded; determining whether a second delivery capacity of the delivery agent to deliver the goods during a second period is exceeded; and determining to deliver the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity as recited in independent Claims 1, 10 and 19.

WebVan teaches a system and method of displaying the capacity utilization of a goods delivery system having a least one delivery agent location, address and delivery zone: obtaining delivery agent information of a delivery agent that delivers a plurality of goods; calculating a first delivery capacity for the delivery agent information wherein the first delivery capacity is represented as a plurality of slots and based on *at least the* size of the good ; calculating a portion of the delivery capacity used for the delivery agent information; displaying a periodic calendar format illustrating the delivery agent information and delivery agent information for a respective zone for each day in the respective period; determining whether the first delivery capacity of the delivery agent to deliver the goods during the first period is exceeded ; determining whether a second deliver capacity of the delivery agent to deliver the goods during a second period is exceeded; and determining to deliver the goods during the second period upon determining that the second delivery capacity is not exceeded, wherein the goods are configured to utilizing the second delivery capacity.

WebVan fails to teach or suggest a goods delivery system and method comprising displaying the capacity utilization of the goods delivery system in a periodic calendar format, having drill down capability to display additional daily details, illustrative of a delivery agent's information including at least one of location, name, code, schedule name, or zone group and statistics including at least one of delivery capacity, reserved capacity or scheduled deliveries for a respective zone for each day in a respective period; calculating a portion of the delivery agent's delivery capacity used based on

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assigned work units to each good of the plurality of goods wherein the assigned work units represent a multiplication factor associated with each good and are indicative of a portion of a first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the delivery capacity; determining whether a first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded; determining whether a second delivery capacity of the delivery agent to deliver the goods during a second period is exceeded; and determining to deliver the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity as recited in independent Claims 1, 10 and 19.

None of the prior art of record, taken individually or in any combination, teach, inter alia, a method, apparatus and computer program embodied on a computer readable medium for executing a computer process for a goods delivery system and method comprising displaying the capacity utilization of the goods delivery system in a periodic calendar format, having drill down capability to display additional daily details, illustrative of a delivery agent's information including at least one of location, name, code, schedule name, or zone group and statistics including at least one of delivery capacity, reserved capacity or scheduled deliveries for a respective zone for each day in a respective period; calculating a portion of the delivery agent's delivery capacity used

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based on assigned work units to each good of the plurality of goods wherein the assigned work units represent a multiplication factor associated with each good and are indicative of a portion of a first volume defined by a number of slots used to deliver each good, the work unit generated by a supplier of the good based a size of the good and a degree of difficulty in installing the good to facilitate equalizing slots for the delivery capacity; determining whether a first delivery capacity of the delivery agent to deliver the goods during a first period is exceeded; determining whether a second delivery capacity of the delivery agent to deliver the goods during a second period is exceeded; and determining to deliver the goods during the second period upon determining that the first delivery capacity is exceeded and the second delivery capacity is not exceeded, wherein the goods are configured to utilize the entire second delivery capacity as recited in independent Claims 1, 10 and 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Roach et al., U.S. Patent No. 5,434,394, teach a good delivery system and method comprising customers at point-of-sale terminals purchase and schedule goods (e.g. major appliances) to be delivered and installed (installation services) in their home wherein the system displays warehouse inventory and delivery capacity.

- Spicer, U.S. Patent No. 5,157,714, teach a system and method for determining and display the capacity (volume, load) of a goods delivery system and method.

- Pennisi, U.S. Patent No. 7,243,074, teach system and method for determining and displaying the capacity utilization of a goods delivery system and method wherein capacity is determined by day for each zone and represented via a plurality of slots.

- Parker et al., U.S. Patent No. 7,251,612, teach a goods delivery system and method comprising scheduling the goods (e.g. home delivery) wherein the goods delivery capacity is represented/displayed in a periodic calendar format comprising a plurality of slots (timeslots).

- Hancock et al., U.S. Patent Publication No. 2003/0009361, teach a goods delivery system and method wherein the capacity of the goods delivery system is determined by several physical characteristics of the goods including size and weight as well as characteristics of the delivery vehicles.

- Jaccoma, Just In Time: Frigidaire Launches Its Own Computer-Driven Distribution System (1992), teaches a goods (major appliance) delivery system and

method (Priority Express) comprising inventory management, warehouse performance management and transportation load planning/management. Jaccoma further teaches that the other three U.S. appliance manufacturers have similar systems including GE Appliances Quick Response program.

- Byrnes, Transportation and Logistics: Whirlpool (1993), teaches a goods (major appliance) delivery system and method (Quality Express) for managing the delivery of goods from stores/warehouses to consumers homes via third part logistics providers/carriers.

- Witt, Whirlpool Puts New Spin On Third-Party Logistics (1997), teaches a major appliance delivery and installation system and method wherein consumers order major appliances at retail stores which are shipped directly from regional distribution centers and installed by "delivery agents." Witt further teaches that the goods delivery system and method enables companies to monitor delivery agent performance.

- McGovern, Load Management Software (1999), teaches the well-known utilization of load management systems and methods to plan/optimize loads in delivery vehicles based on a plurality of information about the goods/products (e.g. stacking tables, product tables, weight, etc.) and vehicles. McGovern further teaches the commercial availability of load management systems such as Descartes Energy Load Optimization system ("Descartes load management software system takes orders and looks at hoe the truck should be loaded optimally for warehouse workers and the driver.").



- Andel, Running and winning with E-Commerce (1999), teaches Sears utilization of a goods delivery system and method to manage the home delivery of major appliances and other goods wherein customers purchase and schedule (reserve) delivery of the goods via a point-of-sale terminal in the store and based on the "customer's convenience and according to truck capacity."

- Cordeau, A Tabu Search Algorithm For The Site Dependent Vehicle Routing Problem With Time Windows (2001), teach a goods delivery system and method wherein goods delivery depends on service time windows and vehicle capacities.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Scott Jarrett  
Asst. Examiner  
August 3, 2007



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